

Appl. No. 09/754,277  
Amendment and/or Response  
Reply to Office Action of December 24, 2003

Page 3 of 11

Amendments to the Claims:

A clean version of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121(c). This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Withdrawn) An apparatus for manufacturing a semiconductor device, comprising:

    plasma detecting means provided inside an upper electrode for supplying gas, of a parallel-plate type dry etching apparatus.

2. (Withdrawn). The apparatus according to claim 1, wherein said upper electrode comprises a cooling plate having a plurality of gas supply holes for supplying the gas, a gas-introducing plate having gas holes for introducing the gas into a semiconductor wafer, a jig for fixing said gas-introducing plate to said cooling plate, and a sensor for detecting plasma, which is provided between said gas introducing plate and said cooling plate.

3-9. (Cancelled).

10. (Currently Amended) An apparatus for manufacturing a semiconductor device, comprising:

    an upper electrode that supplies gas to a parallel-plate dry etching apparatus; and  
    a plasma detecting device provided inside said upper

Atty. Docket No. OKI.201

Appl. No. 09/754,277  
Amendment and/or Response  
Reply to Office Action of December 24, 2003

Page 4 of 11

electrode, wherein ~~operation of said the parallel-plate dry-etching apparatus is adapted to cease operation ceases~~ if a pressure of a plasma measured by said plasma detecting device is lower than a predetermined value.

11. (Previously Presented) An apparatus as recited in claim 10, wherein said upper electrode comprises: a cooling plate having a plurality of gas supply holes, which supply the gas; a gas-introducing plate having gas holes, which introduce the gas into a semiconductor wafer; and a jig, which fixes said gas-introducing plate to said cooling plate.

12. (Previously Presented) An apparatus as recited in claim 11, wherein said plasma detecting device is provided between said gas-introducing plate and said cooling plate.

13. (Previously Presented) An apparatus as recited in claim 14, wherein said pressure increases as said gas holes of said gas-introducing plate increase.

14. (Currently Amended) An apparatus for manufacturing a semiconductor device, comprising:

an upper electrode that supplies gas in a parallel-plate dry etching apparatus;

a first plasma detecting device, which measures a first pressure of a first plasma, provided inside of said upper electrode;

a second plasma detecting device, which measures a second pressure of a second plasma, provided within said dry etching apparatus in which a wafer is placed; and

a detector, which measures a pressure differential between respective pressures of said first and said second plasma detecting devices, wherein, ~~the apparatus is adapted to cease operation upon reaching a predetermined pressure differential, operation of the apparatus is terminated.~~

Atty. Docket No. OKI.201

Appl. No. 09/754,277  
Amendment and/or Response  
Reply to Office Action of December 24, 2003

Page 5 of 11

15. (Previously Presented) An apparatus as recited in claim 14, wherein said upper electrode comprises: a cooling plate having a plurality of gas supply holes, which supply the gas; a gas-introducing plate having gas holes, which introduce the gas into a semiconductor wafer; and a jig, which fixes said gas-introducing plate to said cooling plate.
16. (Previously Presented) An apparatus as recited in claim 14, wherein said first plasma detecting device is provided between said gas-introducing plate and said cooling plate.
17. (Previously Presented) An apparatus as recited in claim 14, wherein said first pressure increases as said gas holes of said gas-introducing plate increase.
18. (Currently Amended) An apparatus as recited in claim 15, wherein said first plasma detecting device is at a backside of said gas introducing plate.
19. (Cancelled).

Atty. Docket No. OKI.201